

AMENDMENTS TO THE CLAIMS:

Claims 1-4 (cancelled)

5. (New) A hydraulic tensioner comprising:

a cylinder having a hollow space to be filled with hydraulic oil;

a plunger slidably mounted in said hollow space so as to partition said hollow space into a pressure chamber and a reservoir chamber, said plunger having a passage through which said pressure chamber and said reservoir chamber communicate with each other, said passage defining a valve seat formed of a steel for carburizing, said steel comprising a forgeable alloyed steel for a mechanical structure, said valve seat having a surface carbon concentration of from 0.55 % - 0.75 % after heat treatment, and there being no deposition of carbides on the surface of said valve seat after the heat treatment;

a pushrod mounted in said hollow space so as to be axially movable together with said plunger, said pushrod having one end thereof protruding from an end of said cylinder;

a spring mounted in said hollow space so as to bias said plunger and said pushrod in a direction toward said end of said cylinder; and


a check ball movable into and out of contact with said valve seat, said check ball being adapted to move into contact with said valve seat when pressure in said pressure chamber exceeds pressure in said reservoir chamber so as to close said passage.

6. (New) The hydraulic tensioner according to claim 5, wherein said valve seat has a surface hardness Hv of not less than 800.

7. (New) The hydraulic tensioner according to claim 6, wherein said surface hardness of said valve seat is at least equal to a surface hardness of said check ball.

8. (New) The hydraulic tensioner according to claim 7, wherein said forgeable alloyed steel for a mechanical structure comprises a chrome steel.

9. (New) The hydraulic tensioner according to claim 7, wherein
said forgeable alloyed steel for a mechanical structure comprises a chrome molybdenum steel.
10. (New) The hydraulic tensioner according to claim 6, wherein
said forgeable alloyed steel for a mechanical structure comprises a chrome steel.
11. (New) The hydraulic tensioner according to claim 6, wherein
said forgeable alloyed steel for a mechanical structure comprises a chrome molybdenum steel.
12. (New) The hydraulic tensioner according to claim 5, wherein
said forgeable alloyed steel for a mechanical structure comprises a chrome steel.
13. (New) The hydraulic tensioner according to claim 5, wherein
said forgeable alloyed steel for a mechanical structure comprises a chrome molybdenum steel.
14. (New) A hydraulic tensioner comprising:
a housing having a cylinder chamber;
a plunger slidably mounted in said cylinder chamber;
a pressure chamber defined in said cylinder chamber behind said plunger, said housing having
an oil supply passage so as to communicate with said pressure chamber;
a spring mounted in said cylinder chamber for biasing said plunger outwardly of said cylinder
chamber; and
a check valve for preventing hydraulic oil in said pressure chamber from flowing back into
said oil supply passage, said check valve having a valve seat near an outlet end of said oil supply
passage, said valve seat being formed of a steel for carburizing, said steel comprising a forgeable
alloyed steel for a mechanical structure, said valve seat having a surface carbon concentration of from
0.55 % - 0.75 % after heat treatment, and there being no deposition of carbides on the surface of said
valve seat after the heat treatment.

- 
15. (New) The hydraulic tensioner according to claim 14, wherein said valve seat has a surface hardness Hv of not less than 800.
16. (New) The hydraulic tensioner according to claim 15, further comprising:
a check ball movable into and out of contact with said valve seat,
wherein said surface hardness of said valve seat is at least equal to a surface hardness of said check ball.
17. (New) The hydraulic tensioner according to claim 16, wherein said forgeable alloyed steel for a mechanical structure comprises a chrome steel.
18. (New) The hydraulic tensioner according to claim 16, wherein said forgeable alloyed steel for a mechanical structure comprises a chrome molybdenum steel.
19. (New) The hydraulic tensioner according to claim 15, wherein said forgeable alloyed steel for a mechanical structure comprises a chrome steel.
20. (New) The hydraulic tensioner according to claim 15, wherein said forgeable alloyed steel for a mechanical structure comprises a chrome molybdenum steel.
21. (New) The hydraulic tensioner according to claim 14, wherein said forgeable alloyed steel for a mechanical structure comprises a chrome steel.
22. (New) The hydraulic tensioner according to claim 14, wherein said forgeable alloyed steel for a mechanical structure comprises a chrome molybdenum steel.